

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Cured~~A cured epoxy resin with increased flexural impact strength and breaking extension coupled with retention of stiffness, comprising deagglomerated barium sulphate having an average primary particle size of $< 0.5 \mu\text{m}$, preferably $< 0.1 \mu\text{m}$, in particular $< 0.08 \mu\text{m}$, very particularly $0.05 \mu\text{m}$, the barium sulphate comprising a crystallization inhibitor and a dispersant.

Claim 2 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 1, ~~characterized in that~~wherein the barium sulphate is present in an amount of 0.1% to 50% by weight.

Claim 3 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 1 ~~or 2, characterized in that,~~ wherein the primary particle size of the barium sulphate is in the range from $0.01 \mu\text{m}$ to $0.5 \mu\text{m}$, in particular in the range $0.01 \mu\text{m}$ to $0.1 \mu\text{m}$, very particularly in the range from 0.01 to $0.05 \mu\text{m}$.

Claim 4 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 1, ~~characterized in that~~wherein 90% of the secondary barium sulphate particles are smaller than $2 \mu\text{m}$, preferably $< 250 \text{ nm}$, in particular $< 200 \text{ nm}$, with particular preference $< 130 \text{ nm}$, with particular preference $< 100 \text{ nm}$.

Claim 5 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 1, ~~obtainable by dispersing the~~ wherein the deagglomerated barium sulphate is dispersed in a

~~precursor of the epoxy resin prior to its curing, preferably in the hardener, polyol and/or in~~
the uncured epoxy resin.

Claim 6 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 5,
~~obtainable by using hardeners wherein the hardener is based on polyoxyalkylenamines or in~~
an anhydride hardeners hardener.

Claim 7 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 5,
~~characterized in that~~1, wherein the barium sulphate which is used which comprises a
dispersant that sterically prevents reagglomeration of the barium sulphate particles and that
contains groups which are able to interact with the surface of the barium sulphate, ~~preferably~~
~~carboxylate, phosphate, phosphonate, bisphosphonate, sulphate or sulphonate groups, the~~
dispersant being substituted by polar groups which endow the barium sulphate particles with
a hydrophilicized surface, ~~preferably hydroxyl groups or amino groups, which permit the~~
coupling of the barium sulphate particles to or into the epoxide and, accompanying the
coupling, a further deagglomeration.

Claim 8 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 7,
~~characterized in that~~wherein the dispersant is a polyether carboxylate which is substituted by
terminal hydroxyl groups on the ether groups.

Claim 9 (Currently Amended): ~~Cured~~The cured epoxy resin according to Claim 1,
~~characterized in that~~wherein the crystallization inhibitor is citric acid or sodium polyacrylate.

Claim 10 (Currently Amended): ~~Composite~~A composite material comprising epoxy resin according to ~~any one of Claims 1 to 9.~~Claim 1.

Claim 11 (Currently Amended): ~~Composite~~The composite material according to Claim 10, ~~characterized in that it comprises~~comprising carbon fibre or glass fibre reinforcement.

Claim 12 (Currently Amended): ~~Composition~~A composition comprising epoxy resin precursor, ~~preferably hardener,~~ and barium sulphate having a primary particle size $< 0.5 \mu\text{m}$, ~~in particular $< 0.1 \mu\text{m}$,~~ and comprising crystallization inhibitor and a dispersant, ~~the dispersant preferably being a polyether polycarboxylate substituted terminally on the polyether groups by hydroxyl groups.~~

Claim 13 (Currently Amended): ~~Composition~~The composition according to Claim 12, ~~characterized in that~~wherein the barium sulphate is present in an amount of 0.1 % to 50% by weight, based on the total weight of the composition.

Claim 14 (Currently Amended): ~~Composition~~A composition comprising uncured epoxy resin and barium sulphate having a primary particle size $< 0.5 \mu\text{m}$, ~~in particular $< 0.1 \mu\text{m}$,~~ the barium sulphate comprising crystallization inhibitor and a dispersant, ~~the dispersant preferably being a polyether polycarboxylate substituted terminally on the polyether groups by hydroxyl groups.~~

Claim 15 (Currently Amended): ~~Composition~~The composition according to Claim 14, ~~characterized in that~~wherein the barium sulphate is present in an amount of 0.1% to 50% by weight, based on the total weight of the composition.

Claim 16 (Currently Amended): ~~Process~~A process for producing epoxy resins according to ~~any one of Claims~~Claim 1 to 9, ~~characterized in that, wherein~~ barium sulphate ~~with~~having a particle size $< 0.5 \mu\text{m}$, ~~in particular $< 0.1 \mu\text{m}$, which comprises~~and comprising a crystallization inhibitor and a dispersant, ~~the dispersant preferably being a polyether carboxylate substituted terminally on the polyether groups by hydroxyl groups, is deagglomerated in the~~a precursor of the cured epoxy resin, preferably in the hardener or in the uncured epoxy resin, and then the cured epoxy resin is produced.

Claim 17 (Currently Amended): A method of use~~Use~~ of the composite material according to Claim 10 ~~or 11~~ in watercraft construction, in wind turbines, pipes, containers, in vehicle construction or in aircraft construction.

Claim 18 (New): The cured epoxy resin according to Claim 1, wherein the deagglomerated barium sulphate has an average primary particle size of $< 0.1 \mu\text{m}$.

Claim 19 (New): The cured epoxy resin according to Claim 1, wherein 90% of the secondary barium sulphate particles are smaller than 250 nm.

Claim 20 (New): The cured epoxy resin according to Claim 1, obtainable by dispersing the deagglomerated barium sulphate in a precursor of the epoxy resin prior to its curing.

Claim 21 (New): The process according to Claim 16, wherein the barium sulphate is dispersed in the hardener or in the uncured epoxy resin.